Claim 127. I claim the access method of claim 126 characterized in that said known set of priorities includes the available recording room in said program data storage.

Claim 128. I claim the access method of claim 126 characterized in that said known set of priorities are ranked in an order of preference.

Claim 129. I claim the access method of claim 126 characterized in that said known set of priorities may be changed from time to time.

## REMARKS

While a review of the cited Tweedy and Ullrich references is believed to demonstrate many differences (some of which have previously been set forth), the applicant has ascertained that a modification of the pending claims should place these claims into condition for allowance over all references including those filed contemporaneously herewith.

The modification is to amend the main independent claims to recite that it can include at least two programs present in program data storage at a user's location (i.e. the remote location not the main central server's location).

This modification recognizes that in the preferred embodiment of the invention a data storage area for multiple programs exists at the user's site (See for example the program data storage and removable data storage in fig 1 of the present application. See also figs 4 and 5 relative to the selective recordation of multiple programs in the user's program data storage.). This allows each user to select and view one and/or multiple programs virtually at random within the limits of the storage capability at his location whenever he desires (see for example pg 2 lns 22-25). This allows a user to interactively program the system in order to select, control and/or utilize the program and/or data being accessed (pg 7 lns 3-24). includes the listing of the currently stored programs at his location, which the user may use to playback the stored programs (pg 21 lns 16-18). The user can select ones of upcoming programs for use or storage (pg 14 lns 10-16) or the programs could be captured for individual non-real time processing (pg 11 lns 1-3). The applicant even recognizes that, with a finite amount of program data storage capability, sooner or later there will be no storage available at the users site for incoming programs (pg 11 lns 9-12). The invention thus includes a feature for losing or discarding previously stored data in his own program storage according to a known set of priorities as set forth elsewhere in the patent (pg 11 lns

12-14). These include a multiple viewer priority over single user (pg 11 ln 23), an individual selection to store certain programs (pg 11 lns 26-27), anticipatory programming (pg 11 lns 31-32) or otherwise (pg 12 lns 6-13).

The user may play back any of the multiple stored programs stored at his user location irrespective of what is happening to a particular incoming program (which itself could be accessed in real time independently).

The data itself can be multiple simultaneously provided programs (pg 10 lns 1-3) or it could be successive (pg 11 lns 1-7).

It is not believed that any of the references can be said to accomplish this.

For example, Tweedy is a system which allows continuous audio to be directed to a specific terminal when a requested stillframe is being presented (see for example col 3 lns 3-23). Tweedy does not have any storage of two programs at the users location nor does it have any way for the user to selectively select anything from memory.

For further example Ullrich provides programs and promotion distributed on assortment of different channels of a transmission system (col 5 lns 31-34). By staggering or overlapping the time intervals the subscriber is said to be able to select a particular channel for reception at his

location (col 4 lns 1-5, col 5 lns 64-67). However in no instance does Ullrich have multiple programs recorded at the users location: to the contrary the programs remain located at the transmitter. Ullrich does not have any way of recording multiple channels at his subscribers location.

It is believed that both Ullrich and Tweedy at most represent the prior art in which a user may typically view a program as it is transmitted (or at best use a conventional VCR to record such for later viewing) (pg 1 lns 25-27).

The presently claimed invention is to be contrasted from this in that there are multiple programs which can be accessed and/or recorded in the particular user's program data storage. The user can thus directly or indirectly select incoming particular program data to be stored or ignored (pg 19 lns 14-19) and access the currently stored programs (which the user may play back at his whim - pg 21 lns 16-18). The invention even goes so far as to cope with the problems of multiple programs and insufficient memory (selective overriding see pg 20 lns 20-23). Real time viewing is also possible (see for example pg 22 lns 24-31).

In that the claimed user's multiple program storage and access is distinctly different from that of the cited Ullrich and Tweedy references, it is respectively urged that the pending claims should be allowable over all art of record.

Favorable action is solicited.

Respectfully submitted,

William S. Lightbody (29,557)





## APPENDIX

Claim 1. I claim an improved access system for multiple programs delivered in compressed form on one or more delivery channels,

said access system including at least one of the multiple programs being delivered without a user's specific request,

at least one of said multiple programs including at least some substantive displayable information that may be distinct from a listing of the programs allowing access, storage, and/or retrieval thereof, said access system further including:

means for recording at least two of the multiple programs in a data storage medium at the user's location, means for the user to select a particular program from the data storage medium at the user's location and means to decompress said particular program for use by the user before or after storage, which use can include display of a particular program including at least some of said substantive displayable information.





Claim 2. I claim the access system of claim 1 characterized in that there is one storage medium for storing multiple programs delivered on a schedule over which the user has no control.

Claim 3. I claim the access system of claim 1 characterized in that the programs are stored in a compressed format.

Claim 4. I claim the access system of claim 1 characterized by the addition of program information delivered to and stored at the user's location and means to access said program information.

Claim 5. I claim the access system of claim 4 characterized by the addition of data manager means to allow a user to access the program.

Claim 6. I claim a system having multiple programs delivered in a compressed form on one or more delivery media together with program identification data to a user at a given user location,

at least one of said multiple programs including at least some substantive displayable information that may be distinct from a listing of the program identification data,

the system including:

means at the given user location to record program identification data for the multiple programs,

means at the same given user location to access the recorded program identification data for the multiple programs, means at the same given user location to process the recorded program identification data to allow selective access to at least two of the multiple programs,

and means for the user to record and use said at least two of the multiple programs at the user location, which use of such programs can include display of the program including said at least some substantive displayable information.

Claim 7. I claim the system of claim 6 characterized in that the multiple programs and program identification data are delivered contemporaneously and by the addition of means to delay the programs to allow processing of the program identification data.

Claim 8. I claim the system of claim 6 characterized by the addition of data manager means to process the program identification data.

Claim 9. I claim the access system of claim 6 characterized by the addition of data manager means to allow the user to access the programs.

Claim 10. I claim an improved system for delivering multiple programs in a compressed form via one or more delivery channels from a site to a particular user's location without the particular user's control,

at least one of said multiple programs including at least some substantive displayable information that may be distinct from a listing of the programs allowing access, storage, and/or retrieval thereof,

said improvement including:

the addition of means to store at least two of the multiple programs in compressed form at the particular user's location and means at the particular user's location to selectively access and decompress the programs at that location respectively,

said access including displaying the programs, which displaying can include the program including said at least some substantive displayable information.

Claim 11. I claim the access system of claim 10 characterized in that said means to store the programs includes an optical storage medium.

Claim 12. I claim the access system of claim 10 characterized in that said means to store the programs includes computer memory.

Claim 13. I claim the access system of claim 10 characterized in that the programs are compressed in a MPEG type form and means to selectively decompress said MPEG type signals.

Claim 14. I claim a multiple program access system having a program material storage capability with a limited capacity, the improvement including:

means to store at least two of the multiple programs in the storage having a limited capacity at a user location, overwrite means to automatically overwrite previously stored program material including at least some program material which

#

5

has not been previously accessed based on determinable criteria developed from a known set of priorities,

said known set of priorities which includes at least one priority other than updating of existing program materials.

Claim 15. I claim the system of claim 14 characterized in that said overwrite means includes consideration of available storage.

Claim 16. I claim the system of claim 14 characterized in that said overwrite means includes consideration of the time the program material was stored.

Claim 17. I claim the system of claim 14 wherein there are multiple users having a priority and characterized in that said overwrite means includes consideration of the multiple user's priority.

Claim 19. I claim a multiple program access system having a program material storage capability for programs, the multiple programs subject to an access, storage, and/or retrieval date, the improvement including:

means to store at least two of the multiple programs in the program material storage area at a user location, means

AND STATES

to automatically allow access for storage of programs in previously utilized program material storage area upon occurrence of a certain event other than the accessing one of the stored multiple programs in such program material storage area, with at least one of said multiple programs including at least some of said substantive displayable information.

#

Claim 20. I claim the access system of claim 19 characterized in that said certain event is the arrival of a certain time subsequent to the time of a particular program's storage.

Claim 21. I claim a multiple program access system having an ability to reproduce an accessible program having frequency related information with a certain intended run time of presentation for a user requiring a different run time of presentation,

the improvement including:

means to store at least two multiple programs at the user location in program data storage,

means to select the accessible program from program data including the at least two multiple programs and means to alter the frequency of the frequency related information to automatically compensate for the different run time of

presentation and thus the certain run time of presentation of the accessible program to the different run time.

Claim 22. I claim the access system of claim 21 wherein the different run time is determined by the user's interruption of access to the programs.

Claim 23. I claim the access system of claim 22 characterized in that said accessible program would normally terminate at a time certain and

characterized in that said automatic means alters the different run time so as to terminate said accessible program at the same time as said time certain.

Claim 25. I claim an access system for multiple programs delivered in compressed form across one or more delivery channels,

the multiple programs include at least one program delivered without a given user's request therefor and a listing which may be separate of the programs allowing access, storage, and/or retrieval thereof,

a program data stream, said program data stream including at least some substantive displayable information, said access system including:

#3

means at the given user's location to select a particular program from said program data stream without off location contact using the listing,

means to record said selected program with another program in a multiple program data storage media at the given user's location, and means to selectively decompress said selected program for display, said display which can include display of the program including said at least some substantive displayable information.

Claim 26. I claim the system of claim 25 characterized in that program identification data is also delivered for those programs delivered without a given user's request,

the multiple programs and program identification data being delivered substantially contemporaneously and by the addition of means to delay the programs to allow processing of the program identification data.

Claim 27. I claim the system of claim 26 characterized by the addition of data manager means to process the program identification data.

Claim 28. I claim an access system having a storage area for multiple programs having substantive displayable information, the programs subject to access, storage, and/or retrieval by a listing,

the improvement including:

means at a user location to record at least part of at least two multiple programs having substantive displayable information in a program material storage area,

means at the user location to access at least part of a given program having substantive displayable information from the program material storage area so as to select reproduction thereof and

means at the user location to record programs having substantive displayable information at the same time as said reproduction which recording can include the remainder of said given program and/or another program in the storage area.

Claim 29. I claim an access system having a decompression circuit and a frequency artifact producing circuit, the improvement of means to record in program data storage and display at least two multiple programs at a user location, a frequency artifact modifier circuit,

means to pass the programs through the decompression circuit and then through said frequency artifact modifier

#3

circuit, and means to selectively bypass the frequency artifact modifier circuit when the frequency artifact producing circuit is inactive.

Claim 30. I claim the access system of claim 29 characterized in that the decompression decoder is a MPEG type decoder.

Claim 31. I claim the access system of claim 29 characterized in that the artifact modifier circuit is a frequency converter.

Claim 33. I claim an access system having multiple channels of substantive displayable information and access information for delivery of multiple programs to a remote location,

the improvement including:

a data manager, said data manager being located at said remote location,

said data manager having a memory for storing the access information relative to the delivered information including information relative to at least one delivered upcoming program,

and means for said data manager to selectively control access to the substantive displayable information on the multiple channels for presentation of said programs which can include the display of said at least one delivered upcoming program and the recording of at least two of the multiple programs in program material storage at said remote location.

#

Claim 34. I claim the access system of claim 33 characterized by the addition of a data storage for the channels of information.

Claim 35. I claim the access system of claim 33 characterized by the addition of program information relative to the multiple channels of information and means for said data manager to utilize such program information.

Claim 36. I claim the access system of claim 33 characterized by the addition of other services and means for said data manager to access said other services.

Claim 37. I claim an improved access system for a particular user to access multiple programs delivered in compressed form via one or more delivery channels,

at least one of said multiple programs including at least some substantive displayable information,

said access system including program information delivered separate from said substantive displayable information to the particular user at the given location,

means for recording at least two of the multiple programs in a compressed format in a program data storage medium at the given location,

means at the given location for the particular user to access said program information and to select a particular program for presentation at the given location,

and means to decompress said particular program for display which can include the display of said at least some substantive displayable information.

Claim 38. I claim the access system of claim 37 characterized by the addition of data manager means to allow the user to access the program.

Claim 39. I claim a system having multiple programs transmitted in a compressed form via a transmission media with program identification data transmitted to a particular user at a given location.

at least one of the programs including at least some substantive displayable information that may be other than the program identification data,

the system including means at the given location for the particular user to directly access the program identification data,

means to delay the programs to allow processing of the program identification data, means to process the program identification data at the given location,

and data manager means at the given location to process the program identification data and to allow the particular user to selectively access the programs at the given location, which access can include the display of said at least some substantive displayable information and the recording of at least two of the multiple programs in a program material storage area at the given location.

Claim 40. I claim an improved system for a multiplicity of programs transmitted in a compressed form on one or more transmission channels,

a listing of the programs to allow the access, storage, and/or retrieval thereof also being transmitted, characterized by the addition including:

means to store at least two of said multiplicity of programs in their compressed form at a given location,

at least one of said multiplicity of programs including at least some substantive displayable information,

said means to store the programs including an optical storage medium which storage can include said at least some substantive displayable information,

and means to selectively access a program using the listing and decompress the program from said means to store at least two of said multiplicity of programs in program data storage at said given location for display.

characterized in that the programs are compressed in a MPEG type form and means to selectively decompress said MPEG type signals.

Claim 42. I claim the access system of claim 40 characterized in that there are a number of sets of multiplicity programs that can be selectively stored.

Claim 43. I claim an improved access system for multiple substantive displayable programs delivered via one or more delivery channels to a user location, a listing of the

programs allowing the access, storage, and/or retrieval thereof also delivered,

aid access system including:

a program data storage at the user location, said program data storage recording at least two selected ones of the multiple delivered programs,

a user control, said user control selectively retrieving said selected ones of the multiple delivered programs from said program data storage using the listing,

and said program data storage simultaneously recording other selected portions of the multiple delivered programs as said selected portion of a substantive displayable program is being selectively retrieved by said user control.

Claim 44. I claim the access system of claim 43 characterized in that said selected portion and at least one of said other selected portions are from the same program.

Claim 45. I claim the access system of claim 43 characterized in that said selected portion and at least on of said other selected portions are from different programs.

Claim 46. I claim the access system of claim 44 wherein the program of which said selected portion is a part,

16

said program has a normal presentation conclusion time from initial retrieval and characterized in that the retrieval of said selected portion can be selectively interrupted by the user for a period,

any retrieval of said selected portion can be accelerated to compensate for said period, and said acceleration allowing the program to end at the normal presentation conclusion time.

Claim 47. I claim the access system of claim 46 wherein the program has a frequency and characterized by a frequency shift means,

and said frequency shift means altering the frequency of any accelerated portion to be substantially equal to the frequency of the program.

Claim 48. I claim an improved access system for multiple programs transmitted via one or more transmission channels, and a listing of the programs allowing the access, storage, and/or retrieval thereof,

said access system including:

a data manager, said data manager being located at a particular user's given location,

H

a data stream, said data stream passing via a delivery channel for recording in said data manager,

a user control, said user control allowing access to the data in said data manager using the listing of programs,

a program data storage at the particular user's given location, said program data storage recording at least two of the multiple programs transmitted on the transmission channel without any active selection by the user,

at least one of said programs including at least some substantive displayable information[ other than],

and means for the user at said given location to use data in said data manager to retrieve selected portions of the programs in said multiple program data storage via the listing thereof, which retrieval can include the display of said at least some substantive displayable information.

Claim 49. I claim the access system of claim 48 characterized in that said data stream includes information of upcoming substantive programs.

Claim 50. I claim the access system of claim 48 characterized in that said user control can be selectively programmed to automatically record programs in said program data storage based on the data in said data manager.

Claim 51. I claim the access system of claim 48 characterized in that substantially all of the programs transmitted on a transmission channel at transmitted without any user's control.

Claim 52. I claim the access system of claim 51 characterized in that the programs are substantially continually transmitted.

Claim 53. I claim the access system of claim 48 characterized in that said program data storage can record programs and the user can retrieve a program from said program data storage at the same time.

Claim 54. I claim the access system of claim 48
wherein the program of which said selected portion is a part,
has a normal presentation conclusion time from initial
retrieval and characterized in that the retrieval of said
selected portion can be selectively suspended by the user for a
period of time,

any retrieval of said selected portion can be automatically accelerated to compensate for said period of time,

and said acceleration allowing the program to end at the normal presentation conclusion time.

Claim 55. I claim the access system of claim 54 wherein the program has an original frequency and characterized by frequency shift means,

said frequency shift means altering the frequency of any accelerated portion to be substantially equal to the original frequency of the program.

Claim 56. I claim an improved access system for multiple programs transmitted on one or more transmission channels, said access system including:

a data manager, said data manager being located at a particular user's given location,

a data stream, said data stream passing via a delivery channel for access at the direction of said data manager,

a user control, said user control allowing access to the data in said data manager,

a program data storage at the particular user's given location, said program data storage recording at least two of the multiple programs transmitted on the transmission channel

H

without any active selection of individual ones of the specific programs by the user,

at least one of said programs including at least some substantive displayable information other than listing data,

and select means at said given location for said data manager to use the listing data in said data manager to automatically record selected portions of the transmitted multiple programs in said program data storage, which recording can include said at least some substantive displayable information.

Claim 57. I claim the access system of claim 56 characterized in that said select means is programmed to discard programs recorded in said program data storage including programs not yet retrieved according to a known set of priorities.

Claim 58. I claim the access system of claim 57 characterized in that said known set of priorities includes the available recording room in said program data storage.

Claim 59. I claim the access system of claim 57 characterized in that said known set of priorities are ranked in an order of preference.

H

Claim 60. I claim the access system of claim 56 characterized in that said known set of priorities may be changed from time to time.

Claim 61. I claim the access system of claim 55 characterized in that said select means is programmed to record transmitted programs in said program data storage according to a selection algorithm.

Claim 62. I claim the access system of claim 60 characterized in that said selection algorithm includes one or more of consideration of the desirability of the program to the user,

the number of users for a program, the time of the program, the relation of the program to programs previously stored, the content of the program, the particular channel for the program and/or the availability of removable storage.

Claim 63. I claim the access system of claim 61 characterized in that said select means is programmed to discard or record over previously recorded programs in said program data storage including not retrieved programs according to a known set of priorities.

Claim 64. I claim the access system of claim 63 characterized in that said known set of priorities includes the available recording room in said program data storage.

Claim 65. I claim the access system of claim 63 characterized in that said known set of priorities are ranked in an order of preference.

Claim 66. I claim the access system of claim 63 characterized in that said known set of priorities may be changed from time to time.

Claim 67. I claim a method for accessing multiple programs delivered in compressed form on one or more delivery channels,

said method including delivering at least one of the multiple programs without a user's specific request,

at least one of said multiple programs including at least some substantive displayable information that may be distinct from a listing of the programs allowing access, storage, and/or retrieval thereof, said method further including:

recording at least two of the multiple programs in a data storage medium at the user's location, selecting a

particular program from the multiple programs in the data storage medium at the user's location and decompressing said particular program for use by the user before or after storage, which use can include displaying of a particular program including at least some of said substantive displayable information.

AH

Claim 68. I claim the method of claim 67 characterized by storing multiple programs delivered on a schedule over which the user has no control in one storage medium.

Claim 69. I claim the method of claim 67 characterized by storing the programs in a compressed format.

Claim 70. I claim the method of claim 67 characterized by the addition of delivering and storing program information at the user's location and accessing said program information.

Claim 71. I claim the method of claim 70 characterized by the addition of using a data manager means to access the program.

claim 72. I claim a method for accessing multiple programs delivered in a compressed form on one or more delivery media together with program identification data to a user at a given user location,

at least one of said multiple programs including at least some substantive displayable information that may be distinct from a listing of the program identification data,

the method including:

recording at the given user location program identification data for the multiple programs,

accessing at the same given user location the recorded program identification data for the multiple programs,

processing at the same given user location the recorded program identification data to selectively access to at least two of the multiple programs,

and using said at least two of the multiple programs, which use of such programs can include display of the program including said at least some substantive displayable information and recording of at least two of the multiple programs in program data storage at the given user location.

Claim 73. I claim the method of claim 72 characterized in that the multiple programs and program identification data are delivered contemporaneously and by the

addition of delaying the programs to allow processing of the program identification data.

Claim 74. I claim the method of claim 72 characterized by the addition of processing the program identification data by a data manager means.

Claim 75. I claim the method of claim 72 characterized by the addition of accessing the programs by a data manager means.

Claim 76. I claim an improved method for delivering multiple programs in a compressed form via one or more delivery channels from a site to a particular user's location without the particular user's control,

at least one of said multiple programs including at least some substantive displayable information that may be distinct from a listing of the programs allowing access, storage, and/or retrieval thereof,

said improved method including:

the storing at least two of the multiple programs in compressed form in a program data storage at the particular user's location and selectively accessing and decompressing a program at that particular user's location respectively,

said accessing including displaying the programs, which displaying can include the program including said at least some substantive displayable information.

Claim 77. I claim the method of claim 76 characterized in that said storing the programs includes an optical storage medium.

Claim 78. I claim the method of claim 76 characterized in that said storing the programs includes computer memory.

Claim 79. I claim the method of claim 76 characterized by compressing the programs in a MPEG type form and selectively decompressing said MPEG type signals.

Claim 80. I claim a multiple program access method having a storage capability with a limited capacity, the improvement including:

storing at least two of the multiple programs in the program material storage having a limited capacity,

and automatically overwriting previously stored program material including at least some program material which

H

has not been previously accessed based on determinable criteria developed from a known set of priorities,

said known set of priorities which includes at least one priority other than updating of existing program materials.

Claim 81. I claim the method of claim 80 characterized in that said overwriting includes consideration of available storage.

Claim 82. I claim the method of claim 80 characterized in that said overwriting includes consideration of the time the program material was stored.

Claim 83. I claim the method of claim 80 wherein there are multiple users having a priority and characterized in that said overwriting includes consideration of the multiple user's priority.

Claim 84. I claim a multiple program access method having a storage capability for programs, the multiple programs subject to an access, storage, and/or retrieval date,

the improvement including:

storing at least two of the multiple programs in the storage area at a given user location, and automatically

AH

allowing access for storage of programs in previously utilized storage area upon occurrence of a certain event other than the accessing one of the stored multiple programs in such storage area, with at least one of said multiple programs including at least some of said substantive displayable information.

Claim 85. I claim the access method of claim 84 characterized in that said certain event is the arrival of a certain time subsequent to the time of a particular program's storage.

Claim 86. I claim a multiple program access method having an ability to reproduce an accessible program having frequency related information with a certain intended run time of presentation from storage of at least two of the multiple programs, for a user requiring a different run time of presentation,

the improvement including:

selecting the accessible program from the at least two multiple programs in storage at the user location and altering the frequency of the frequency related information of such program to automatically compensate for the different run time of presentation and thus the certain run time of

presentation of the accessible program to the different run time.

Claim 87. I claim the access method of claim 86 wherein the different run time is determined by the user's interruption of access to the programs.

Claim 88. I claim the access method of claim 87 characterized in that said accessible program would normally terminate at a time certain and

characterized in that said altering the different run time so as to terminate said accessible program at the same time as said time certain.

Claim 89. I claim an access method for multiple programs delivered in compressed form across one or more delivery channels,

the multiple programs include at least one program delivered without a given user's request therefor and a listing which may be separate of the programs allowing access, storage, and/or retrieval thereof,

a program data stream, said program data stream including at least some substantive displayable information, said access method including:

HH

selecting at the given user's location a particular program from said program data stream without off location contact using the listing,

recording said selected program in a multiple program data storage media with another program at the given user's location,

and selectively decompressing said selected program for displaying, said displaying which can include display of the program including said at least some substantive displayable information.

Claim 90. I claim the method of claim 89 characterized in that program identification data is also delivered for those programs delivered without a given user's request,

the multiple programs and program identification data being delivered substantially contemporaneously and by the addition of delaying the programs to allow processing of the program identification data.

Claim 91. I claim the method of claim 90 characterized by the addition of processing the program identification data by a data manager means.

Claim 92. I claim an access method having a storage area for multiple programs having substantive displayable information, the programs subject to access, storage, and/or retrieval at a user location by a listing,

the improvement including:

recording at least part of two multiple programs having substantive displayable information in the multiple program storage area at a user location,

accessing at least part of a given program having substantive displayable information from the multiple program storage area so as to select reproduction thereof and

recording programs having substantive displayable information at the same time as said reproduction which recording can include the remainder of said given program and/or another program in the storage area.

Claim 93. I claim an access method having a decompression circuit and a frequency artifact producing circuit,

the improvement of storing at least two multiple programs in a program material storage area at a user location, passing a program through the decompression circuit and then passing it through a frequency artifact modifier circuit,

and selectively bypassing the frequency artifact modifier circuit when the frequency artifact producing circuit is inactive.

Claim 94. I claim the access method of claim 93 characterized in that the decompression decoder is a MPEG type decoder.

Claim 95. I claim the access method of claim 93 characterized in that the artifact modifier circuit is a frequency converter.

Claim 96. I claim an access method having multiple channels of substantive displayable information and access information for delivery of multiple programs to a remote

the method including:

a data manager,

storing the access information relative to the delivered information including information relative to at least one delivered upcoming program in the memory of a data manager located at said \remote location,

and selectively controlling access to the substantive displayable information on the multiple channels for

presentation of said programs which can include the display of said at least one delivered upcoming program at said remote location using said data manager and the recording of at least two of the multiple programs in program data storage at the remote location.

Claim 97. I claim the access method of claim 96 characterized by the addition of storing the channels of information.

Claim 98. I claim the access method of claim 96 characterized by the addition of program information relative to the multiple channels of information and utilizing such program information in the data manager.

Claim 99. I claim the access method of claim 96 characterized by the addition of other services and accessing said other services by said data manager.

Claim 100. I claim an improved access method for a particular user to access multiple programs delivered in compressed form via one or more delivery channels,

at least one of said multiple programs including at least some substantive displayable information,

said access method including delivery program information separate from said substantive displayable information to the particular user at the given location,

recording at least two of the multiple programs in a compressed format in a data storage medium at the given location,

accessing by the particular user at the given location said program information and selecting a particular program for presentation at the given location,

and decompressing said particular program for display which can include the display of said at least some substantive displayable information.

Claim 101. I claim the access method of claim 100 characterized by the addition of allowing the user to access the program through the data manager means.

Claim 102. I claim a method having multiple programs transmitted in a compressed form via a transmission media with program identification data transmitted to a particular user at a given location

at least one of the programs including at least some substantive displayable information that may be other than the program identification data,

the method including the particular user directly accessing the program identification data at the given location,

delaying the programs to allow processing of the program identification data, processing the program identification data at the given location,

and processing the program identification data and allowing the particular user to selectively access the programs at the given location by a data manager means at the given location, which access can include displaying said at least some substantive displayable information and the recording of at least two of the multiple programs in a program data storage at the given location.

Claim 103. I claim an improved method for a multiplicity of programs transmitted in a compressed form on one or more transmission channels,

listing the programs to allow the access, storage, and/or retrieval thereof also being transmitted,

characterized by the addition including:

storing at least two of said multiplicity of programs in their compressed form in a program data storage at a given location,

at least one of said multiplicity of programs including at least some substantive displayable information,

said storing the programs including an optical storage medium which storage can include said at least some substantive displayable information,

and selectively accessing a program using the listing and decompressing the program from said means to store at least two of said multiplicity of programs in the program data storage at said given location for display.

Claim 104. I claim the access method of claim 103 characterized in that the programs are compressed in a MPEG type form and selectively decompressing said MPEG type signals.

Claim 105. I claim the access method of claim 103 characterized in that there are a number of sets of multiplicity programs that are selectively stored.

Claim 106. I claim an improved access method for substantive displayable programs delivered via one or more delivery channels to a particular location,

listing the programs allowing the access, storage, and/or retrieval thereof also delivered,

said access method \including:

06/18/02

recording at least two selected ones of the multiple delivered programs in a program data storage at the particular location,

selectively retrieving a selected one[s] of the delivered program from said multiple program data storage using the listing by a user control,

and simultaneously recording other selected portions of the delivered programs in said program data storage as said selected portion of a substantive displayable program is being selectively retrieved by said user control.

Claim 107. I claim the access method of claim 106 characterized in that said selected portion and at least one of said other selected portions are from the same program.

Claim 108. I claim the access method of claim 106 characterized in that said selected portion and at least on of said other selected portions are from different programs.

Claim 109. I claim the access method of claim 107 wherein the program of which said selected portion is a part having a normal presentation conclusion time from initial retrieval,

and characterized in that the retrieving said selected portion can be selectively interrupted by the user for a period,

any retrieving of said selected portion can be accelerated to compensate for said period, and said acceleration allowing the program to end at the normal presentation conclusion time.

Claim 110. I claim the access method of claim 109 wherein the program has a frequency and characterized by altering the frequency of any accelerated portion to be substantially equal to the frequency of the program.

Claim 111. I claim an improved access method for multiple programs transmitted via one or more transmission channels, and a listing of the programs allowing the access, storage, and/or retrieval thereof,

said adcess method including:

passing a data stream via a delivery channel for recording in a data manager located at a particular user's given location,

accessing the data in said data manager using the listing of programs,

H

recording at least of the multiple programs transmitted on the transmission channel without any active selection by the user in a multiple program data storage at said particular user's given location,

at least one of said programs including at least some substantive displayable information,

and retrieving selected portions of the programs in said multiple program data storage at said given location via the listing thereof in said data manager, which retrieval can include the display of said at least some substantive displayable information.

Claim 112. I claim the access method of claim 111 characterized in that said data stream includes information of upcoming substantive programs.

Claim 113. I claim the access method of claim 111 characterized by selectively programming said user control to automatically record programs in said program data storage based on the data in said data manager.

Claim 114. I claim the access method of claim 111 characterized by transmitting substantially all of the programs

transmitted on a transmission channel without any user's control.

Claim 115. I claim the access method of claim 114 characterized in that the programs are substantially continually transmitted.

Claim 116. I claim the access method of claim 111 characterized in that said program data storage can record programs and the user retrieving a program from said program data storage at the same time.

Claim 117. I claim the access method of claim 111 wherein the program of which said selected portion is a part having a normal presentation conclusion time from initial retrieval and characterized in that retrieving of said selected portion can be selectively suspended by the user for a period of time,

automatically accelerating any retrieving of said selected portion to compensate for said period of time,

and said accelerating allowing the program to end at the normal presentation conclusion time.

41

Claim 118. I claim the access method of claim 117 wherein the program has an original frequency and characterized by altering the frequency of any accelerated portion by a frequency shift means to be substantially equal to the original frequency of the program.

Claim 119. I claim an improved access method for multiple programs transmitted on one or more transmission channels, said access system including:

passing a data stream via a delivery channel for access at the direction of a data manager located at a particular user's given location,

allowing access to the data in said data manager by a user control,

recording at least two of the multiple programs transmitted on the transmission channel in a multiple program data storage without any active selection of individual ones of the specific programs by the user at said given location,

at least one of said multiple programs including at least some substantive displayable information other than listing data,

automatically recording selected portions of the transmitted programs in said multiple program data storage at said given location using the listing data in said data

H

manager, which recording can include said at least some substantive displayable information.

Claim 120. I claim the access method of claim 119 characterized by programming said selection to discard programs recorded in said program data storage including programs not yet retrieved according to a known set of priorities.

Claim 121. I claim the access method of claim 120 characterized in that said known set of priorities includes the available recording room in said program data storage.

Claim 122. I claim the access method of claim 120 characterized in that said known set of priorities are ranked in an order of preference.

Claim 123. I claim the access method of claim 119 characterized in that said known set of priorities may be changed from time to time.

Claim 124. I claim the access method of claim 118 characterized by programming said select means to record transmitted programs in said program data storage according to a selection algorithm.

Claim 125. I claim the access method of claim 123 characterized in that said selection algorithm includes one or more of consideration of the desirability of the program to the user,

the number of users for a program, the time of the program, the relation of the program to programs previously stored, the content of the program, the particular channel for the program and/or the availability of removable storage.

Claim 126. I claim the access method of claim 124 characterized in that said selecting discards or records over previously recorded programs in said program data storage including not retrieved programs according to a known set of priorities.

Claim 127. I claim the access method of claim 126 characterized in that said known set of priorities includes the available recording room in said program data storage.

Claim 128. I claim the access method of claim 126 characterized in that said known set of priorities are ranked in an order of preference.

AH

-**4** ( )

##

Claim 129. I claim the access method of claim 126 characterized in that said known set of priorities may be changed from time to time.